The Value Leader™
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505 Instruction Manual

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505

PHOTO / CONTACT TACHOMETER

Instruction Manual

WARNING

Read instructions before operating:
Be sure these instructions accompany the tool when passed from one user to a new or inexperienced user.

Rotating equipment can cause flying particles
Wear Safety Goggles (User and bystanders).
Flying particles can cause eye injury.
Keep yourself, clothing and test equipment clear of moving parts.

Note: To zero previous readings on all tach operations, Press and hold the START button then press the desired function button. If a stored value appears, release START button until the display goes off. Then press the START button immediately and a zero reading will be displayed until the unit is used for measuring RPM or the START button is released.

OPERATION SPECIFICATIONS

Function	Range	Accuracy
Photo Tach	6 - 30,000 RPM	± 0.1% of FS + 1 digit
Contact Tach	6 - 20,000 RPM	± 0.1% of FS + 1 digit
Surface Speed	0.9 - 3,046 m/min	± 0.1% of FS + 1 digit
	2.0 - 9,990 ft/min	± 0.1% of FS + 1 digit

GENERAL SPECIFICATIONS

Display	5 Digit LCD
Operating Temperature:	32° to 122°F 0° to 50°C
Operating Humidity:	80% Max. R.H.
Power Supply:	AA Alkaline Bat. (2 each)

BATTERY REPLACEMENT

Measurement Procedure:

1. Remove the screw holding the battery compartment cover in place on the back of the 505.
2. Slide the cover off of the unit.
3. Remove the 2 each “AA” alkaline batteries and replace with the same type.
4. Replace the cover and screw.

STANDARD ACCESSORIES

Reflective Tape A501
Contact RPM Adapter (screw on) A502
RPM Adapter (Cone Type) A503
RPM Adapter (Funnel Type) A504
Surface Speed Test Wheel A505
(O.D. 48.7 mm exactly)
Carrying case A915

PHOTO TACH OPERATION

Measurement Procedure:

1. Unscrew contact collar from optical end of 505 (if attached).
2. Attach a piece of reflectlive tape on the rotating object to be measured.
3. Depress and hold the START button and then press the Photo button (lower right) on the 505.
4. With the start button depressed, point the optical end at the rotating surface so the relective tape passes the lens every rotation.
5. Read the RPM on the LCD display.

Memory Recall

Note: The memory resets itself once the START button is depressed and stable measurements are displayed for 10 seconds or 12 revolutions (whichever is longer). The values are stored when the START button is released.

1. When you are finished taking measurements, release the START button.
2. Depress the MEMORY button once, the LAST reading will be displayed
3. Press the MEMORY button twice, the MAX reading will be displayed.
4. Press the MEMORY button three times, the MIN reading will be displayed.

Unit will auto power off after 5 seconds.

CONTACT TACH OPERATION

Measurement Procedure:

1. Screw the shaft assembly to the optical end of the 505.
2. Insert the cone or concave wheel that more closely matches the end of the component to be measured on the shaft assembly.
3. Press and hold the START button and then press the Contact button (lower left) on the 505.
4. While pressing the START button, hold the wheel against the end of the rotating shaft..
5. Read the RPM on the LCD.

Memory Recall

Note: The memory resets itself once the START button is depressed and stable measurements are displayed for 10 seconds or 12 revolutions (whichever is longer). The values are stored when the START button is released.

1. When you are finished taking measurements, release the START button.
2. Depress the MEMORY button once, the LAST reading will be displayed
3. Press the MEMORY button twice, the MAX reading will be displayed.
4. Press the MEMORY button three times, the MIN reading will be displayed.

Unit will power off after 5 seconds.

SURFACE SPEED OPERATION

Measurement Procedure:

1. Screw the shaft assembly to the optical end of the 505.
2. Insert the large wheel to the end of the shaft assembly.
3. Press and hold the START button and then press the ft/min (feet per minute) or m/min (meters per minute) on the 505.
4. While pressing the START button, hold the wheel against the moving surface.
5. Read the speed on the LCD.

Memory Recall

Note: The memory resets itself once the START button is depressed and stable measurements are displayed for 10 seconds or 12 revolutions (whichever is longer). The values are stored when the START button is released.

1. When you are finished taking measurements, release the START button.
2. Depress the MEMORY button once, the LAST reading will be displayed
3. Press the MEMORY button twice, the MAX reading will be displayed.
4. Press the MEMORY button three times, the MIN reading will be displayed.

Unit will power off after 5 seconds.